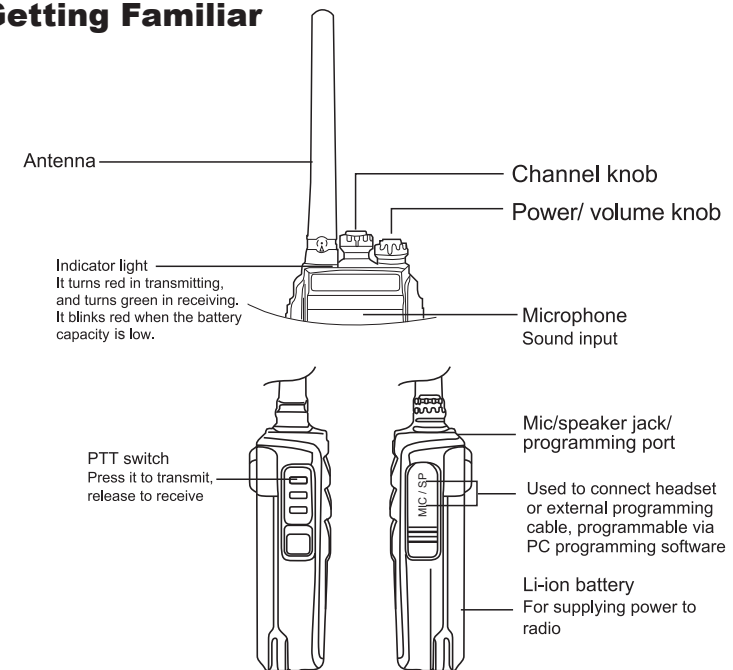


USER'S MANUAL

Scanning Receiver

Getting Familiar

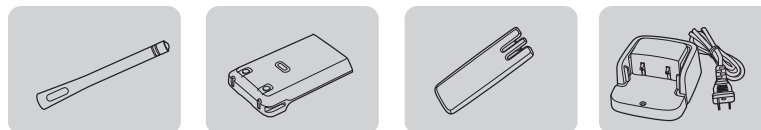


| 01 |

Unpacking and checking equipment

Welcome to use two-way radio. Carefully unpack the radio. We recommend you check the items listed in the following table before discarding the package. If any item is missing, please contact local dealer immediately.

Supplied accessories:



Antenna (1)

Li-ion battery (1)

Belt Clip (1)

Charger (1)



User's Manual (1)

Note: The antenna frequency range please refers to the annular label at the bottom of antenna.

| 02 |

Basic operation

1 Scan Function

When the radio is allowed to be scanned, which can be set by the software. you can press the PTT key to turn on or turn off the scan. When the scan begins, indicators lights green. the radio will scan automatically from channel 1 to 16 which is defined as scan added. When there is signal in the scanning channel, it will stop in the channel for talk.

Note:

When there is signal in the scanning channel, it will stop in the channel for a talk and after several seconds.

Please note that scan is only available when there are two or more than two memory channels and two or more scan added channels

2. Battery Save Function

This function can be set by the software.

Turn on this function can make the standby time more longer.

3. Scrambler

When the radio is allowed the scrambler function. and press the key. TX voice will be sent out with scrambler. other radio only received the signal when its scrambler also turns on.

4 Busy Channel Lock

You can turn on/off this function via software.

A: if the current channel does not have CTCSS/DCS, When there is signal. TX prohibited when you press PTT.

| 03 |

- B: If the current channel does not have CTCSS/DCS. when there is signal which does not have CTCSS/DCS. TX prohibited vwhen you press PTT.
- C: If the current channels does not have CTCSS/DCS. vwhen there is signal which have CTCSS/DCS. the radio will transmit when you press PTT.

5. Wide/Narrow Bandwidth Setting

The default is wide band. You can select the wide band (25KHz) or narrow band(12.5KHz) through the menu "Channel Spacing" of the "Channel Edit" in the software.

6 .VOX

Speak to the microphone in normal voice to transmit, no need to press PTT switch, turn VOX on/off though the software.

A: when VOX is on in your working channel.

Speak to the microphone directly, it will transmit automatically.

The radio stops transmitting when there is no voice, and waits for receiving.

B: when a headset with a microphone is used.

When VOX is on, you should VOX again for the radio to identify voice volume.

If the microphone is too sensitive. the noise around radio will start transmitting.

If the microphone is not sensitive. the radio can not collect your voice. Please Adjust VOX level well to guarantee smooth communications.

English/Chinese Voice Prompt

Voice prompt

The default setting is Chinese voice prompt. and you will know the working condition of the radio with voice prompt.

04

- 1) The voice prompt can be selected "Chinese/English/Tone/OFF" through the menu "Voice/Beep Tone" of the "Optional Features" in the software for. When choosing "OFF", voice prompt turns off.
- 2) Channel annunciation: You will get to know the working conditions of current channel which is being operated.
- 3) Low battery alert: The radio will alert you when the battery capacity reaches the minimum operating voltage.

Low battery prompt

The default setting is Chinese voice prompt. When transmitting or standby. if the battery capacity reaches the pre-determined low level. the indicator light blinks red. and a low battery alert tone will be heard.

The indicating tone can be "Please change the battery". When the low battery alert occurs. it can not transmit. please change or charge the battery.

Squelch function

The squelch level will determine the signal strength to open the speaker of the radio. If the squelch level is lower. the background noise of opening the radios speaker will be higher. and the corresponding communication range will be further. but the anti-interference capacity will be weaker.

The default setting of squelch level is 5. you can adjust it through the menu -Squelch Level" of the -Optional Features- in the software for. Level 0 to 9 can be selected. 0 is the lowest level.

Time out timer (TOT)

05

Specifications

General	
FrequencyRange	TX: 420-450MHz RX: 400-480MHz
FrequencyStability	± 2.5PPm
Channel Capacity	256 channels
Operating Voltage	DC 7.4V
Antenna	High gain antenna
Antenna Impedance	50Ω
Transmitter	
RF power	2.5 W
Modulation Type(Wide/Narrow band)	16KΦF3E/11 KΦF3E
Max. Fr. deviation(Wide/Narrow band)	≤5KHZ/ ≤2.5KHZ
Adjacent Ch. power(Wide/Narrow band)	≤-65dB/≤-60dB
Spurious Power	≤7uW
pre-emphasis character	6dB/Each frequency doubling the increment

07

The purpose of TOT is to prevent any radio from talking in one channel for a long time. and to prevent the transceiver from being damaged because of continuous transmission. If the transmitting time exceeds the TOT pre-set time. the radio will sound "Du".

Power protection function

When the radio is in normal use or maintenance, the transmission will be prohibited if the working voltage is beyond the normal supplying voltage. Lower than 3V or higher than 5V, the transmission will be prohibition. The radio cannot power on when it is higher than 5V.

CTCSS/DCS

CTCSS and DCS is the sub-audio signaling, to prevent the radio from receiving unwanted signal in the same channel.

When the CTCSS/DCS is set, then within the communication range, you can only receive signals from the same channel with the same CTCSS/DCS setting. When the CTCSS/DCS is not set, you will get all the signal from the same channel within the communication range.

06

Modulated noise	<-40dB
DCS/CTCSS frequency deviation	0.6KHZ $\pm$ 0.15KHZ, 0.4KHZ $\pm$ 0.1KHZ
Intermediation sensitivity	8~12mV
Modulation distortion	<5%
Receiver	
Reference Sensitivity	-122dBm(12dB SINAD)
Audio power	1 W
Audio Distortion	<5%
Blocking	$\geq$ 85
Inter-modulation(Wide/Narrow band)	$\geq$ 60dB $\geq$ 55dB
Adjacent Ch.Selection	$\geq$ 65dB $\geq$ 60 dB

Note: Specifications will be revised without notice due to technical improvement. Thank you.

08

Thank you for buying two-way radios, we will do our best to provide you with a stable, clear and efficient wireless communication services. In order for you to enjoy a better quality warranty service, please focus on the following information:

The products warranty period begins from the purchasing date, if product failure under normal use within warranty period occurs, according to the contents of this warranty, (the radio is guaranteed for 12 months, accessories 6 months), please carry the warranty card originals and purchase invoice to designated authorized warranty repair station for warranty service.

The following situations occur during warranty period will be implemented in paid service:

- (1) Failure to produce the warranty card
- (2) The card has altered traces or inconsistent with the product
- (3) Defect or damage caused by abnormal or non-normal use
- (4) Defect or damage caused by misuse, accident, water or negligence
- (5) Defect or damage caused by improper testing, operation, maintenance, installation, disassembly or adjustment
- (6) Defect or damage caused by unauthorized repair or disassembly
- (7) Defect or damage caused by force majeure
- (8) Wear and tear under normal use

When you are in need of repair, please send the radio, warranty card and purchase invoice together by post or take directly to designated authorized service stations, shipping costs should be borne by the user.

Maintenance record

Carry-in date			
Completion date			
Fault description			
Maintenance staff numbers			
Maintenance personnel No.			
Signature			

This warranty card to be kept by the user, no replenishment if lost

09

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.